

Notice of Allowability

Application No.

09/750,311

Examiner

David S. Kim

Applicant(s)

ARECCO ET AL.

Art Unit

2633

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 14 November 2005.
2. ☒ The allowed claim(s) is/are 36-46 (renumbered as 1-11).
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____


M. R. SEDIGHIAN
PRIMARY EXAMINER

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mr. Thomas Frame, Esq. on Thursday, 01 December 2005. The application has been amended as follows:

In the claims

Claim 36 (renumbered as claim 1, additions are the underlined portions).

An apparatus, comprising:

a first ring network having a first optical carrier; and

a second ring network having a second optical carrier, the first and second ring networks including:

a pair of nodes that comprise a first and a second node, the pair being coupled along the first and second optical carriers and being operable to manage a subset of wavelengths within a set of transmission wavelengths, the set of transmission wavelengths including more than one transmission wavelength such that one of the transmission wavelengths can be switched while other transmission wavelengths in the set are not switched, a selected one of the set of transmission wavelengths may be reserved on the first optical carrier during a normal operative condition and during a failure the selected wavelength is implemented on the first optical carrier, wherein the first and second nodes are further operable to communicate with each other and to communicate along a working path under the normal operative condition, the first and second nodes being further operable to communicate with each other along a protection path during the failure within a selected one of the first and second ring networks such that one or more optical signals are rerouted along the protection path during the failure, and wherein a response to a failure condition is executed on a channel level, wherein each of the first and second nodes includes a plurality of transmitting and receiving transponders including:

a first transmitting transponder optically coupled to the first optical carrier,

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a second transmitting transponder optically coupled to the first optical carrier, and
a third transmitting transponder optically coupled to the second optical carrier, the
plurality of receiving transponders including:

a first receiving transponder optically coupled to the second optical carrier,
a second receiving transponder optically coupled to the second optical carrier,
and a third receiving transponder optically coupled to the first optical carrier, and wherein, under the
normal condition, optical switches in an optical switch are configured to optically connect an optical
transmitter to the first transmitting transponder,

to optically connect the first receiving transponder to the third transmitting
transponder,

to optically connect the second receiving transponder to an optical receiver, and
to optically connect the third receiving transponder to the second transmitting
transponder;

the first and second ring networks also including a first primary gateway node and a first
secondary gateway node, the first primary gateway node and the first secondary gateway node being
coupled along the first and second optical carriers;

a third ring network having a third optical carrier;

a fourth ring network having a fourth optical carrier, the third and fourth ring networks
including:

a second primary gateway node and a second secondary gateway node, the second
primary gateway node and a second secondary gateway node being coupled along the third and fourth
optical carriers;

wherein the primary gateway nodes exchange signals with each other through a first set of optical
connections that are separate from the first, second, third, and fourth carriers;

wherein the secondary gateway nodes exchange signals with each other through a second set of
optical connections that are separate from the first, second, third, and fourth carriers; and

wherein the gateway nodes have a drop and continue functionality.

2. The following is an examiner's statement of reasons for allowance:

The previous Office Action is a Final Rejection (mailed on 20 September 2005) that includes claim rejections under 35 U.S.C. 112, 35 U.S.C. 102, and the judicially created doctrine of obviousness-type double patenting. Applicant's response included amendments to the claims and a terminal disclaimer. The amendments overcome the claim rejections under 35 U.S.C. 112. The terminal disclaimer overcomes the double patenting rejections. However, Applicant's response does not overcome the claim rejections under 35 U.S.C. 102, the claims being anticipated by Application No. 09/607,657, which has a common inventor with the instant application.

In order to overcome the prior art reference of Application No. 09/607,657, Applicant and Examiner notice that Application No. 09/607,657 would be disqualified under 35 U.S.C. 103(c) if the claims include subject matter not disclosed by Application No. 09/607,657. That is, PALM records show that, at the time the claimed invention of the instant application was made, it appears that Application No. 09/607,657 and the instant application were owned by the same person or subject to an obligation of assignment to the same person, Cisco Technology, Inc. Accordingly, as Application No. 09/607,657 qualifies only as prior art under 35 U.S.C. 102(e), a rejection under 35 U.S.C. 103 based on Application No. 09/607,657 would not be proper. Thus, in order to overcome the prior art reference of Application No. 09/607,657, Applicant authorized the Examiner's amendment above to include subject matter of the instant application not disclosed by Application No. 09/607,657.

Besides Application No. 09/607,657, the prior art of record does not teach or make obvious all the particular optical connections within the optical switch unit of the independent claims. In particular, the closest prior art of record besides Application No. 09/607,657 (Shiragaki et al. European Patent Application EP 920153 A2) does not teach the following connections:

optical switches in an optical switch unit are configured to optically connect the first receiving transponder to the third transmitting transponder and to optically connect the third receiving transponder to the second transmitting transponder.

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Some prior art references, such as Ballintine et al. (U.S. Patent No. 6,246,667 B1) and Sharma et al. (U.S. Patent No. 6,331,906 B1), teach switches that are configured to connect transponders to other transponders (Ballintine et al., Fig. 2; Sharma et al., Fig. 16B-16C). However, it appears that the connections accomplished in these references are mostly electrical connections, not optical.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to David S. Kim whose telephone number is 571-272-3033. The examiner can normally be reached on Mon.-Fri. 9 AM to 5 PM (EST).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason Chan can be reached on 571-272-3022. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

DSK


M. R. SEDIGHIAN
PRIMARY EXAMINER